GLAST Project
Configuration Control Board (CCB) Minutes

A GLAST Project CCB Meeting was held on Monday, May 6, 2002, at 3:30 p.m., in Building 16, Room 8A (SEU Program Office Conference Room).

CCB No.: CCB-009

List of Attendees:

Liz Citrin, Al Vernacchio, Norman Rioux, Joy Bretthauer, Dennis Small, Erik Andrews, John Deily, Ed Gaddy and Jim Chipouras

The Following CCRs were discussed and dispositioned:

CCR No.	Subject	Sponsor
433-0040 R1	MSS Radiation Environment Specifications	Norman Rioux/John Deily

Disposition: *Approved with Changes.* The purpose of this CCR was to add radiation environment specifications to the Mission System Specification. The change to Section 3.3.5.1.6 and the first paragraph in section 3.3.6.2.1.1 as submitted with the CCR was modified by the CCB and approved as follows:

FROM (as submitted):

3.3.5.1.6 Radiation Environment

The observatory shall be designed to meet its performance requirements in the radiation environment given in Section 3.3.6. These environments are based on a March 2006 launch with allowance for a launch delay of up to 1 year from that date.

TO (as approved):

3.3.5.1.6 Radiation Environment

The observatory shall be designed to meet its performance requirements in the radiation environment given in Section 3.3.6. These environments are valid for launch dates between March 2006 and March 2007.

FROM (as submitted):

3.3.6.2.1.1 Component TID Specification

Electronic components shall be allowed for consideration for use on the mission if one of the following holds:

TO (as approved):

3.3.6.2.1.1 Component TID Specification

Note: In the context of radiation environment requirements, the word "component" shall be defined to mean an active part, such as a microcircuit, electro-optical device, diode, etc., excluding solar cells. Radiation effects for solar cells shall be considered separately.

Electronic components shall be allowed for consideration for use on the mission if one of the following holds:

Actions items:

The CMO will update CCR 433-0040 R1 with the approved changes, obtain CCR approval signature from the GLAST Project Manager on the CCR form and incorporate the approved changes to the Mission System Specification. The Project Manager also assigned an action to the LAT and GBM Instrument Managers to ensure that these requirements flow down to the instrument specifications.

Note: This CCR was not submitted for review through the GLAST on-line CM system. The CCR sponsor obtained the reviewer comments that were provided with the CCR for CCB.

CCR No.	Subject	Sponsor
433-0051	GBM Pointing Requirements Clarification	Norman Rioux

Disposition: *Deferred.* The purpose of this CCR was to clarify the GBM pointing requirements in the Mission System Specification. This CCR will be approved out of board once concurrence is received from the Project Scientist. A correction to the CCR to change "NAI" to "NaI" in the last sentence of section 3.3.1.11.2 was agreed to by the CCB.

Actions items:

Norman Rioux is to obtain CCR concurrence from the GLAST Project Scientist. Once the concurrence of the Project Scientist is documented, the CMO will update CCR 433-0051 with the approved changes, obtain CCR approval signature from the GLAST Project Manager on the CCR form and incorporate the approved changes to the Mission System Specification.

Note: This CCR was not submitted for review through the GLAST on-line CM system. The CCR sponsor obtained the reviewer comments that were provided with the CCR for CCB.

CCR No.	Subject	Sponsor
433-0052	SPS GBM Pointing Knowledge Budget Clarification	Norman Rioux

Disposition: *Deferred.* The purpose of this CCR was to clarify the GBM pointing knowledge budget in the Spacecraft Performance Specification. This CCR will be approved out of board once CCR 433-0051 is approved. A correction to the CCR to add the word "to" after "respect" in the first sentence of item 1) and change "NAI" to "NaI" in the last sentence of section 3.1.12.3 was agreed to by the CCB.

Actions items:

Once CCR 433-0051 is approved, the CMO will update CCR 433-0052 with the approved changes, obtain CCR approval signature from the GLAST Project Manager on the CCR form and incorporate the approved changes to the Spacecraft Performance Specification.

Note: This CCR was not included in the CCB Agenda and package. The sponsor introduced this CCR at the meeting. This CCR was not submitted for review through the GLAST on-line CM system. The CCR sponsor obtained the reviewer comments that were provided with the CCR for CCB.

CCR No.	Subject	Sponsor
433-0045	SC-LAT IRD Electrical Power Section Update to Include Regulated Buses	Erik Andrews

Disposition: *Approved with Changes.* The purpose of this CCR was to update the LAT-S/C IRD Electrical Power Section to include regulated buses. The change to Section 3.2.4.1.7.6 as submitted with the CCR was modified to include the words "no more than" before "300 W" in the second sentence. It was also noted that concurrence of this CCR was given via telecon by Jim Martin, Martin Nordby, Gunther Haller and Bernie Graf.

Actions items:

The CMO will update CCR 433-0045 with the approved changes, obtain CCR approval signature from the GLAST Project Manager on the CCR form and incorporate the approved changes to the LAT-S/C IRD.

Note: This CCR was not submitted for review through the GLAST on-line CM system. The CCR sponsor obtained the reviewer comments that were provided with the CCR for CCB.

CCR No.	Subject	Sponsor
433-0046	SC-LAT IRD Editorial Notes	Erik Andrews

Disposition: *Approved as Submitted.* The purpose of this CCR was to clarify certain requirements in the LAT-S/C IRD.

Actions items:

Erik Andrews was given an action to obtain CCR concurrence from Martin Nordby. This concurrence was obtained and included in the CCR package shortly after the CCB Meeting.

The CMO will obtain CCR approval signature from the GLAST Project Manager on the CCR form and incorporate the approved changes to the LAT-S/C IRD.

Note: This CCR was not submitted for review through the GLAST on-line CM system. The CCR sponsor obtained the reviewer comments that were provided with the CCR for CCB.

CCR No.	Subject	Sponsor
433-0047	SC-LAT IRD Addition of Sinusoidal Swept Vibe Tests	Erik Andrews

Disposition: *Approved with Changes.* The purpose of this CCR was to add Sinusoidal Swept Vibration section to the LAT-S/C IRD. The change to Section 3.2.2.8.9 as submitted with the CCR was modified to delete the last paragraph. The CCB also made corrections that changed "HZ" to "Hz" in the second sentence and "guide" to "Guide" in the third sentence.

Actions items:

The CMO will update CCR 433-0047 with the approved changes, obtain CCR approval signature from the GLAST Project Manager on the CCR form and incorporate the approved changes to the LAT-S/C IRD.

Note: This CCR was not submitted for review through the GLAST on-line CM system. The CCR sponsor obtained the reviewer comments that were provided with the CCR for CCB.

CCR No.	Subject	Sponsor
433-0048	SC-LAT IRD – Figure A-1 Update	Erik Andrews

Disposition: *This CCR was not ready in time for CCB disposition and was not included in the CCB Agenda package.* The CCR will be dispositioned out of board once the Figure A-1 drawing is obtained by Erik Andrews.

Actions items:

Erik Andrews will provide the Figure A-1 drawing to the CMO. The CMO will prepare the CCR package and obtain CCR approval signature from the GLAST Project Manager on the CCR form and incorporate the approved changes to the LAT-S/C IRD.

Note: This CCR was not submitted for review through the GLAST on-line CM system. The CCR sponsor obtained the reviewer comments that were provided with the CCR for CCB.

CCR No.	Subject	Sponsor
433-0049	SC-LAT IRD – Applicable Documents and LAT Transportation & Handling Plan	Erik Andrews

Disposition: *Approved with Changes.* The purpose of this CCR was to add the LAT Transportation & Handling Plan to the LAT-S/C IRD as a reference document and delete the SC-LAT ICD as a reference document since it does not exist. The CCB disapproved the addition of the LAT Transportation & Handling Plan to the LAT-S/C IRD as a reference document and approved the deletion of the SC-LAT ICD as a reference document. The CCB also made an additional change to section 3.2.2.8.8 as follows:

3.2.2.8.8 LAT Handling Procedures

The LAT handling procedures for use during Observatory integration, transportation, storage and pre-launch activities shall be as negotiated and documented in the LAT Instrument Transportation and Handling Plan, LAT-MD-649-D1 (~~a draft version of this document is provided for reference~~**TBS**).

Actions items:

The CMO will update CCR 433-0049 with the approved changes, obtain CCR approval signature from the GLAST Project Manager on the CCR form and incorporate the approved changes to the LAT-S/C IRD.

Note: This CCR was not submitted for review through the GLAST on-line CM system. The CCR sponsor obtained the reviewer comments that were provided with the CCR for CCB.

CCR No.	**Subject**	**Sponsor**
433-0050	SC-LAT IRD – Clarification of Responsibilities if LAT Radiators go below SEP Plane	Erik Andrews

Disposition: *Approved with Changes.* The purpose of this CCR was to clarify responsibilities if LAT radiators go below the PAF Separation Plane. The CCB disapproved the addition of the last sentence in section 3.2.3.4.1. The CCB approved the remainder of the CCR to delete a "TBR" and change two symbols to "≥" in section 3.2.3.4.1.

Actions items:

The CMO will update CCR 433-0050 with the approved changes, obtain CCR approval signature from the GLAST Project Manager on the CCR form and incorporate the approved changes to the LAT-S/C IRD.

Note: This CCR was not submitted for review through the GLAST on-line CM system. The CCR sponsor obtained the reviewer comments that were provided with the CCR for CCB.

Minutes approved by:

Elizabeth A. Citrin 5/14/02 Date _____

Liz Citrin
GLAST Project Manager
(GLAST Project CCB Chairperson)

Minutes prepared by: Jim Chipouras, GLAST Project Configuration Management Office